school at Parkersburg. The talk was illustrated with a series of maps showing the origin and movement of the recent severe storm that passed from one end of the country to the other, and caused such a decided fall in the temperature. It was a practical talk, and gave much information upon a subject of universal interest.

Mr. A. F. Sims, Forecast Official, gave a lecture on January 20 before the normal school at Cooperstown, N. Y., in continuation of his extensive system of lecturing at all points easily accessible from Albany.

Mr. Maurice Connell, Observer Weather Bureau at Red Bluff, Cal., gave a talk on physical geography and the weather to the pupils of the high school at that place on January 15. He pointed out the causes that affect the climate of California, and explained the Weather Bureau system of symbols and forecasts.

LONG DRY SPELLS.

In the November number of the report of the Colorado section Mr. F. H. Brandenburg publishes an excellent piece of work, viz, a list of all dry periods of twenty days or longer, arranged by seasons, based, of course, entirely upon the records of the Denver station from November, 1871, to December, 1899, inclusive. He counts as a dry spell one in which nothing more than 0.01 inch of rain falls. Thirty-five such spells, of from twenty to forty-six days' duration, are enumerated during the fall months, from August to December; twenty-one cases, of from twenty to fifty-eight days each, during the winter months, from November to February; ten cases, of from twenty to twenty-eight days each, during the spring months, from February to May, and, finally, five cases, of from twenty-four to fifty days each, during the summer months, from May to September.

Since the distribution of barometric pressure, which brings about dry weather, is generally widespread, therefore these dry spells often prevail simultaneously over extensive areas.

In order to show that these long dry spells follow a law of distribution that agrees with the laws of probability or chance, the Editor submits the following enumeration:

Length of spell.	Number of cases.	Length of spell.	Number of cases.	Length of spell.	Number of cases.	Length of spell.	Number of cases.
Days.		*Days.*		*Days.*		*Days.*	
20	10	28	2	36	0	44	0
21	12	29	0	37	2	45	0
22	8	30	1	38	0	46	1
23	5	31	1	39	1	47	0
24	5	32	4	40	1	48	0
25	8	33	3	41	0	49	0
26	1	34	2	42	1	50	1
27	2	35	0	43	1	58	1
Total	.....	.....	.....	.....	....	.....	71

We can not too strongly recommend all observers to compile similar tables, as illustrative of the peculiarities of the local climate. It would also be well to show, not merely these absolutely dry spells, but, also, those in which a very small quantity of water falls. For instance, if at a given station the water supply for the use of a city runs dangerously short when twenty days go by without more than 1 inch of rainfall, it would, therefore, be important to know the number and lengths of intervals having 1 inch of rain. In another case, if the river attains an undesirable height and interferes with business when there has been 10 inches of rain within five days, therefore a record of the intervals within which 10 inches of rain have fallen becomes interesting.

LECTURES AT FARMERS' INSTITUTES.

Mr. E. W. McGann, Section Director, New Brunswick, N. J., writes to the Editor as follows:

I have about completed arrangements with the Secretary of the State Board of Agriculture for a series of addresses to be delivered during the next fall and winter at the Farmers' Institutes held in each county of the State. The themes will be about as follows: What the United States Weather Bureau and the State Service have done, and are doing for the farmers; the principal features of the weather in the vicinity of each Institute; dry and wet seasons; fluctuations in temperature and rainfall, etc. A set of instruments will be on exhibition and fully explained at each Institute, as the Chief has promised me that assistance. * * * I think such a plan will bring the Service closer home to the people, especially the farmers, as very few of them have any idea of the magnitude of the work performed by the National Bureau.

Mr. S. S. Bassler, Local Forecast Official at Cincinnati, Ohio, delivered a talk on Weather Bureau matters to the Farmers' Institute which assembled at Blue Ash, Ohio, on Saturday afternoon, January 6. His address was well received.

CLIMATOLOGY OF SAN DIEGO, CAL.

In the November and December numbers of the California Section Mr. A. G. McAdie, Forecast Official and Section Director, publishes an extensive article by Ford A. Carpenter, Weather Bureau Observer, on the climatology of San Diego. The tables are too elaborate and extensive to be republished in the MONTHLY WEATHER REVIEW, but would make an admirable basis for a monograph or bulletin. The discussion begins with the records for July, 1849, as kept by the United States Army post surgeons, including those kept by the United States Coast Survey and the United States Signal Service, and thus gives a continuous record for fifty years. Owing to the great importance of the question of droughts and the fact that so many persons in southern California have appealed to the Weather Bureau to encourage artificial rain making, the Editor has made the following computation, based upon Mr. Carpenter's table of monthly precipitation after completing the table for the whole of 1899:

Monthly rainfall.

Months.	Number of cases having—				Total monthly (inches).
	0.00-0.10 inches.	0.11-0.50 inches.	0.51-2.00 inches.	2.00 or more inches.	
January	5	3	25	17	1.75
February	3	8	23	16	1.88
March	5	10	28	7	1.37
April	8	21	17	4	0.64
May	21	20	7	2	0.33
June	42	7	1	0	0.07
July	44	4	2	0	0.05
August	40	8	2	0	0.11
September	45	3	2	0	0.08
October	23	16	9	2	0.33
November	9	12	19	10	0.95
December	0	10	24	16	1.97
Total	245	122	159	74	9.58

It appears from this table that the rainfall for November, December, January, February, and March generally comes in showers sufficient for vegetation. During April, May, and October the rains are light showers that may be helpful to vegetation. During June, July, August, and September the showers are too light and infrequent to maintain vegetable life. If plants flourish during these months it must be by virtue of the water stored up in the soil. The rainy season is considered to include the eight months from October to May, inclusive. The following four months constitute the dry season of the agricultural year. The success of the crops